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<110> HOSHINO, Tatsuo
OJIMA, Kazuyuki
SETOGUCHI, Yutaka

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<151> 2000-02-01

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<220>
<223> Description of Artificial Sequence: Antisense primer for expession of the AST gene in E. coli

<400> 6
ggatcctcag tggtggtggt ggtggtgttc gaccggcttg acctgca
47

<210> 7
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5' sense primer for expression of a modified AST gene in E. coli

<400> 7
catatgcacc accaccacca ccacctgtat aaccttcagg ggccc

45

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5' antisense primer for expression of a modified AST gene in E. coli

<400> 8
gtaacaacac catctccggt
20

<210> 9
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 3' anti sense primer for expression of a modified AST gene in E. coli

<400> 9
ggatcctcaa ctcattcgac cggctt
26

<210> 10
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Genome walking primer for cloning of the AST gene

<400> 10

tagagagaag gaggggtacc agatgc
26

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense primer for cloning of the terminator region of the AST gene

<400> 11
ccccggattg tggagaaact
20

<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer for cloning the genomic AST gene

<400> 12
atgttcatct tggtcttgct
20

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense primer for cloning the genomic AST gene

<400> 13

acgtagaagt catagcgcct
20

<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer for RT-PCR of the AST gene

<400> 14
tttgactcaa ggattagcag
20

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense primer for RT-PCR of the AST gene

<400> 15
tgtcttctga gagtcggtga
20

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Degenerate sense primer for cloning of the TPI gene

<220>
<221> misc_feature

<222> 3
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 6
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 15
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 18
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 21
<223> n is a or c or g or t

<400> 16
mgnacnttyt tygtnggngg naay
24

<210> 17
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Degenerate antisense primer for cloning the TPI gene

<220>
<221> misc_feature
<222> 3
<223> n is a or c or g or t

<220>

<221> misc_feature
<222> 6
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 9
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 12
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 18
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 24
<223> n is a or c or g or t

<400> 17
gcnccnccna cnarraancc rtcnacrtc
29

<210> 18
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primary
walking primer for cloning of the TPI terminator

<400> 18
gcttacctcg cttccaacgt ttcccag
27

<210> 19
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nested walking primer for cloning of the TPI terminator

<400> 19
ggatctgtct ctgcctccaa ctgcaag
27

<210> 20
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primary walking primer for cloning of the TPI promoter

<400> 20
gggtcaatgt cggcagcgag aagccca
27

<210> 21
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nested walking primer for cloning of the TPI promoter

<400> 21
atgtactcgg tagcactgat caagtag
27

<210> 22

<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer
for construction of the TPI promoter cassette

<400> 22
gcggccgcat ccgtctcgcc atcagtct
28

<210> 23
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense
primer for construction of the TPI promoter
cassette

<400> 23
cctgcaggtc tagagatgaa taaatataaa gagt
34

<210> 24
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer
for construction of the TPI terminator cassette

<400> 24
cctgcaggta aatatatcca gggattaacc ccta
34

<210> 25

<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense primer for construction of the TPI terminator cassette

<400> 25
ggtacccgtg cgcagtcgac cgagacat
28

<210> 26
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Degenerate sense primer for cloning of the AMY gene

<220>
<221> misc_feature
<222> 15
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 21
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 27
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 30
<223> n is a or c or g or t

<400> 26
gaytayathc arggnatggg nttyrmngcn athtg
35

<210> 27
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Degenerate antisense primer for cloning of the AMY gene

<220>
<221> misc_feature
<222> 6
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 9
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 24
<223> n is a or c or g or t

<220>
<221> misc_feature
<222> 30
<223> n is a or c or g or t

<400> 27
tgytcngtnc crtartadat datnggdatn ccrtc
35

<210> 28
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer
for construction of a partial AMY cassette

<400> 28
ccgcggcatt gatacctcta ccccgt
26

<210> 29
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense
primer for construction of a partial AMY cassette

<400> 29
gcggccgcct gcaatcctgg atccaccg
28

<210> 30
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer
for construction of the AST cassette

<400> 30
tctagaatgt tcatcttggt cttgctca
28

<210> 31
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Antisense primer for construction of the AST cassette

<400> 31
cctgcaggtc attcgaccgg cttgacct
28

<210> 32
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sense primer for confirmation of integration at the AMY locus by PCR analysis

<400> 32
ctctcctgtt cacaaaaaca
20